

REMARKS

This Amendment is responsive to the Office Action dated June 15, 2006. It addresses each of the objections and rejections posed by the examiner. Accordingly, reconsideration is respectfully requested.

Claim 11 was objected to under 35 U.S.C. §112, second paragraph in view of a noted informality relating to "the light pipe." This informality has been corrected in a manner that generally comports with the examiner's helpful suggestion, and the claim should therefore be allowable.

Claims 1-35 are in the application. Claims 1, 5, 8, 30 and 32 were rejected under 35 U.S.C. §102(b) as anticipated by Hattersley.

Claims 2, 11, 12, 15, 18, 26, 28, 31 and 33-35 were rejected under 35 U.S.C. §103(a) as obvious over Hattersley in view of Goltsos. Claims 3, 4, 6, 7, 13, 14, 16, 17, 24, 25 and 27 were also rejected under 35 U.S.C. §103(a) as obvious over Hattersley in view of Goltsos. Claims 9, 10, 19 and 29 were rejected under 35 U.S.C. §103(a) as obvious over Hattersley in view of Patel.

Claims 20-22 were rejected but indicated as allowable is redrafted to include all base and intervening claim recitations. Claim 22 has, thus, been rewritten to include such recitations and is, therefore, allowable.

Applicant has amended each of independent claims 1, 11, 23, 30 and 34 to include the recitation of a first light pipe "defining a hollow tube". Refer, for example, to appli-

cant's specification at page 6, line 12, as well as applicant's Figures which clearly show such a structure. Hattersley specifically teaches a pair of light pipes 30 (paragraph 0028) with lens barrel member 32 between them. Each light pipe is fed by an "LED array."

For a claim to be anticipated under 35 U.S.C. §102, the reference must contain each and every limitation recited in the claim. In this case, independent claims 1 and 30 include recitation of a hollow tube. Such a hollow tube structure which implicitly surrounds the camera lens field means that light is directed inwardly at a low-angle continuously around the entire perimeter of the object. Hattersley only directs low-angle light inwardly at two opposing angles via the two opposing light pipes (which are basically linear). Hence, Hattersley's illumination is significantly limited in directionality, making it less-effective for fully illuminating a scanned surface. To facilitate this transmission through a tubular pipe, applicant recites, in each independent claim, "a first ring light source". Such a "ring" structure, as defined by applicant's specification (for example, a chain of LEDs that substantially continuously surround the pipe perimeter, is nowhere suggested or taught by Hattersley, which simply refers to an "array." For these reasons, independent claims 1 and 30 are not anticipated by Hattersley, and are allowable there-over.

The examiner has proposed a combination of Hattersley with Goltsos. The Goltsos patent relates to self-targeting reader systems. The examiner states that it includes a light pipe that is designed to match the shape of the pattern being scanned. For a patent to be properly combined there must be some teaching or suggestion of the desirability of

the combination. In this case, Hattersley deals with a hand guided scanner having a split pipe for adequate low-angle illumination of a substrate. Goltsos nowhere contemplates such a system. Its light pipe is used to "scramble" a laser used in targeting. The crystal is not used to generate a low angle light in the manner of either Hattersley or applicant. Accordingly the combination of Hattersley and Goltsos is improper as there is simply no teaching of the desirability of providing a laser scrambling crystal (10) to an illumination light pipe or vice-versa. There is certainly no suggestion in Goltsos that the pipe consist of a multiple structure that resides along the outside of a lens field in a manner taught by Hattersley.

Even if combined the references do not collectively teach applicant's independent claims 11, 23 and 34. Rather these claims all now recite a light pipe that defines a "hol-low tube". Neither Hattersley nor Goltsos teach such a structure. The examiner states that the crystal is shaped the same as the field of view. However, it does not surround the field of view and, thus, cannot provide multi-directional inwardly disposed low-angle light as provided (in part) by Hattersley, or generally around the perimeter by applicant's claimed illuminator. Accordingly, independent claims 11, 23, and 32 are allowable over Hattersley in combination with Goltsos.

The claims depending upon each of the above-discussed independent claims 1, 11, 23, 30 and 32 should now also be allowable as being dependent upon now-allowable claims. In particular, it is noted that those claims reciting a "second light pipe" are nowhere taught in the prior art of record. Applicant's specification and figures clearly de-

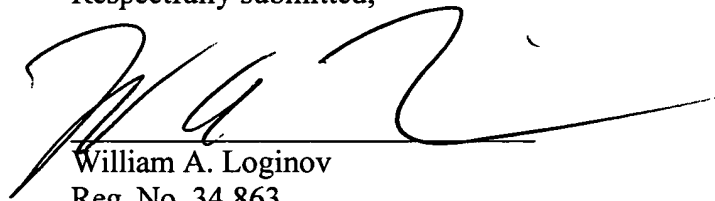
fine the nature of such a second light pipe as a nested structure with respect to the first light pipe and all residing about the field of view.

The application should now be in condition for allowance with each of the examiner's objection and rejections being either addressed or traversed. Applicant therefore respectfully requests issuance of a Notice of Allowance at the earliest possible date.

Applicant earnestly solicits the examiner to contact the undersigned to advance the prosecution in any respect.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'W. Loginov', is written over a horizontal line.

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